

NOTES WITH RESPECT TO THE FRESH WATER
FISHES, AND THE LAND AND FRESH WATER
MOLLUSCS OF KING'S ISLAND.

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Mr. John Brown, Surveyor, has always taken a commendable interest in matters relating to the natural history of Tasmania, and for many years past he has made valuable collections in remote parts of the island, which have yielded novelties of great interest to science. Recently he has spent some time on King's Island, and at my request has carefully observed the nature of the rocks of this dependency, and has also made up a very interesting series of the same, upon which I shall have pleasure in making some observations on another occasion. He has also made a very interesting collection of the fresh water fishes, together with a typical series of the land and fresh water molluscs. These valuable collections, together with notes of distribution, he has very kindly placed at my disposal, and having examined them I think it best to state the results for the information of the members of this Society, and also in order that they may be made of permanent value to naturalists generally by being placed upon the Society's records.

The collection, so far as I have observed, contains four species of fishes, and nine of molluscs of which the following list gives fuller particulars :—

Fresh Water Fishes.

Microperca Tasmanica. Johnston.

Locality, Yellow Rock Creek ; also inhabits the waters of the Northern rivers of Tasmania.

Galaxias truttaceus. Cuv. and Val. (Common spotted variety.)

„ *attenuatus*. Jenyns.

Locality, Yellow Rock Creek ; also common throughout Tasmania.

Galaxias attenuatus, Jenyns, has a very remarkable range of distribution, as it is reported to be common to the fresh water rivers of New Zealand, Falkland Islands, South America (Southern parts), Tasmania, and adjacent islands.

It has, therefore, a great interest in the eyes of those who are working out the problems connected with original centres of distribution.

Anguilla australis.

Locality :—Yellow Rock Creek ; also common to the waters of Tasmania, Australia, and New Zealand.

Land Molluscs.

- Helix ruga.* Cox. Common.
 „ *Brunonia*, nov. sp. Common.
 „ *caesus.* Cox. Very abundant.
 „ *pictilis.* Tate. Common.
 „ *Wynyardensis.* Petterd. Very abundant.
Vitrina Verreauxi. Pfeiffer. Common.
Succinea australis. Pfeiffer. Very abundant.

Fresh Water Molluscs.

- Physa Tasmanica.* Ten.-Woods. Common.
Pisidium Tasmanicum. Ten.-Woods. Common.

These shells have all been collected in or near Porky Lagoon on the West Coast of King's Island. With the exception of *Helix Brunonia*, mihi, which appears to be a new species, all are common to Tasmania, and some of them inhabit the Southern coasts of Australia.

Helix Brunonia, mihi, is a fine shell nearly an inch in greatest diameter, a description of which is hereafter submitted.

HELIX BRUNONIA. NOV. SP.

Shell perforated, convex or depressedly conical, thin translucent, somewhat coarsely and irregularly striated with lines of growth ; surface ornamented with a fine tessellated or scaly epidermis ; tessellation, as seen under lens—oblique, crossing curved lines of growth. Colour dull, pale to dusky purplish brown, lighter underneath ; spire conoidly convex ; nucleus slightly raised ; whorls $4\frac{1}{2}$ convex ; suture well marked, and grooved along its course internally ; periphery and base roundly convex ; aperture oblique, lunately rounded ; peristome simple, sometimes with slightly granular margin ; margins distant, the columellar margin dilated and reflected, almost covering the minute perforation.

Diameter, greatest 0·87, least 0·75 ; height 0·50.

Collected by Mr. J. Brown, Surveyor, at the Springs, near Cape Wickham, King's Island, in moist situation in ti-tree scrub, among decayed vegetable matter.

This fine shell closely approaches *H. bisulcata*, Pfr., and *H. lamproides*, Cox, in some respects, but it is easily distinguished, by the almost closed perforation, by the very convex base, and by its peculiar ornamental shagreen surface. It has a still more close alliance with *H. atramentaria*, of Victoria, from which it differs in the dull, coarse and more concatenate form of the surface rugæ; in the smaller size and in the greater convexity; and especially in the much less gradual enlargement of the whorls. The outer margin is not so boldly curved, nor is the margin flattened at the crown of curve as in the general form of *H. atramentaria*. In the small and partly closed perforation, and in the convex base, it has characters which run very close with the latter species. The relative dimensions, taking as maximum diameter, show more clearly their differences.

		<i>H. Brunonia.</i>	<i>H. atramentaria.</i>
Relative diameter	Max.	1	1
"	Min.	0·86	0·74
"	height	0·67	0·52